

polishing rate of the wafer W.

SUMMARY OF THE INVENTION

Embodiments of the present invention seek to provide a polishing apparatus
5 capable of correcting an inclination of a polishing head.

In an aspect of the present invention, there is provided a polishing apparatus comprising: a polishing table configured to support a polishing pad thereon; a polishing head configured to press a substrate against the polishing pad; a rotational shaft coupled to the polishing head; a self-aligning rolling bearing that tiltably supports the rotational
10 shaft; a radial rolling bearing that receives a radial load of the rotational shaft; a detector configured to detect an inclination of the rotational shaft; and an inclination adjusting device configured to adjust the inclination of the rotational shaft.

In a preferred aspect of the present invention, the polishing apparatus further comprises a controller configured to operate the inclination adjusting device based on the
15 inclination of the rotational shaft detected by the detector.

In a preferred aspect of the present invention, the controller is configured to emit an alarm signal if the inclination of the rotational shaft does not fall within a predetermined range.

In a preferred aspect of the present invention, the self-aligning rolling bearing is
20 located between the polishing head and the radial rolling bearing, and the inclination adjusting device is coupled to the radial rolling bearing.

In a preferred aspect of the present invention, the radial rolling bearing comprises a self-aligning rolling bearing.

In a preferred aspect of the present invention, the radial rolling bearing comprises
25 a combination of angular contact ball bearings.

Since the rotational shaft is supported by the self-aligning rolling bearing, the rotational shaft can tilt. Therefore, the inclination adjusting device can adjust the inclination of the rotational shaft to make the rotational shaft perpendicular to a table